Date: September 15, 2010

To: Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Subject: TV White Spaces
ET Docket Nos. 04-186 and 02-380

Dear Ms. Dortch:

My company, Zinnia Networks Inc., dba CalDSL, provides fixed wireless broadband service in rural areas of San Joaquin County and parts of Calaveras and Alameda counties in Northern California. We rely primarily on unlicensed spectrum to deliver broadband services to consumers that have limited broadband choices. In a number of areas, we are the sole provider that can support telecommuting and voice over IP type applications in a cost effective manner. This is especially true for residential customers who have limited budgets. San Joaquin county is one of the poorest counties in California.

We built our network from scratch using devices authorized under Part 15 rules the FCC adopted to open up 900 MHz, 2.4 GHz and 5 GHz spectrum for unlicensed broadband devices. Thanks to the Commission's initiatives, consumers in our service area can now get broadband service. The combination of availability of license exempt spectrum and the development of standards such as Wi-Fi and WiMAX have dramatically reduced the cost of end user equipment and all consumers have benefited greatly from this.

CalDSL is very interested in utilizing television white spaces so that we can expand our service areas, provide higher speeds and further reduce the cost of serving our customers. We would like to achieve this while charging the same amount we charge today or further reduce the cost to the consumer. With technology advancements, this is exactly what consumers are expecting – more bandwidth for less money. They want to be able to watch TV on their internet and stream videos.

Currently, at many of our sites, 900 MHz and 2.4 GHz bands are so congested that they are useless for providing broadband. 5 GHz is also getting crowded, but it is not as congested. We work with other wireless ISPs and coordinate frequency use where possible. We are committed to deploying as soon as equipment for point-to-multipoint service is commercially available in the TV white space.

I am pleased that the FCC will be acting on TV white space petitions for reconsideration in the near future. There are several proposals that would help us to deploy service:

First, the FCC should allow WISPs to operate using base station antennas mounted higher than 30 meters, and we should be allowed to install customer antennas (CPE) at heights below 10 meters. If we could increase our base station

antenna height to 100 meters, we could cover three times more area with a base station and reduce our equipment, tower acquisition and tower lease fees by a large amount – an amount that could be the difference between deploying and not deploying in an area. We support the WISPA and Motorola proposals to increase base station height. By removing any minimum CPE height restrictions, we would not have to put tall masts on residences and we would be able to provide service at a lower cost.

Second, we believe we should be allowed to operate with power in excess of 4 Watts EIRP in rural areas. As is the case with tower height, operating with higher power will give us a greater coverage area and we will not need to spend as much money on infrastructure.

Third, we are very concerned about a proposal made by FiberTower and others to license white space spectrum for point-to-point wireless backhaul. Not only would adopting this proposal take six channels (36 MHz) and perhaps more channels away from us, but WISPs also would have to protect these licensed links. Moreover, channels and areas far beyond the links would be blocked because the signals from the licensed links would overshoot the path and the endpoints. This is due to the low-cost, low-gain antennas FiberTower wants to use. We also would not deploy if a licensed point-to-point user could come along later and put us out of business with a licensed link. We support the views expressed by WISPA in their September 8 letter and ask the FCC to reject the FiberTower proposal.

There are many licensed band options available for backhaul today. Hundreds of MHz are available in bands from 6GHz to 60 GHz. The FCC has wisely set aside higher frequencies for backhaul applications. FiberTower and others can use them. Since the TV white space bands will propagate much farther than higher frequencies, using them for backhaul is wasteful use of precious spectrum resource.

We are a proud member of WISPA and want to thank you for listening to the voice of the many small WISPs that are serving rural America. In the interest of consumer choice, reduced cost of broadband equipment and wise use of spectrum we hope that you will support our request. Thank you.

Sincerely,

Chau Jasty
President

1660 West Linne, Suite J11, Tracy CA 95377 (209) 832 4420 Fax: (925) 465 0152
http://www.caldsl.com